

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV619642440US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: October 18, 2005

Signature: Andrea Silverman

(Andrea Silverman)

Docket No.: SLII-P01-003
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Hooft Van Huijsduijnen *et al.*

Application No.: 10/530,106

Filed: April 1, 2005

For: USE OF PROTEIN TYROSINE
PHOSPHATASE INHIBITORS FOR
PREVENTION AND/OR TREATMENT OF
CANCER

Confirmation No.: N/A

Art Unit: N/A

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

A copy of each reference on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent,

publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. SLII-P01-003. A duplicate copy of this paper is enclosed.

Dated: October 18, 2005

Respectfully submitted,

By 

Gloria Fuentes

Registration No.: 47,580
FISH & NEAVE IP GROUP
ROPES & GRAY LLP
One International Place
Boston, Massachusetts 02110-2624
(617) 951-7000
(617) 951-7050 (Fax)
Attorneys/Agents For Applicant

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/530,106
				Filing Date	April 1, 2005
				First Named Inventor	Rob Hooft Van Huijsduijnen
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	3	Attorney Docket Number	SLII-P01-003

-U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	ANDERSEN et al., 2001, Structural and evolutionary relationships among protein tyrosine phosphatase domains. Mol. Cell. Biol. 21:7117-7136	
	CB	BARRY et al., 1993, Introduction of antisense oligonucleotides into cells by permeabilization with streptolysin O, Biotechniques 15:1016-1020	
	CC	BHANDARI et al., 1998, Physical and functional interactions between receptor-like protein-tyrosine phosphatase α and p59 ^{l^yn} , J Biol Chem 273:8691-8698	
	CD	BJORGE et al., 2000, Identification of Protein-tyrosine Phosphatase 1B as the Major Tyrosine Phosphatase Activity Capable of Dephosphorylating and Activating c-Src in Several Human Breast Cancer Cell Lines, J. Biol. Chem. 275(52):41439-41446	
	CE	BJORGE et al., 2000, Selected glimpses into the activation and function of Src kinase. Oncogene 19:5620-5635	
	CF	BLASKOVICH and KIM, 2002, Recent discovery and development of protein tyrosine phosphatase inhibitors, Expert Opin. Ther. Patents, 12(6):871-905	
	CG	BOETTIGER et al., 2001, Distinct ligand-binding modes for integrin $\alpha_v\beta_3$ -mediated adhesion to fibronectin versus vitronectin, J. Biol. Chem. 276:31684-31690	
	CH	BOLEN et al., 1992, The Src family of tyrosine protein kinases in hemopoietic signal transduction, FASEB J. 6:3403-3409	
	CI	BRADY-KALNAY and TONKS, 1995, Protein tyrosine phosphatases as adhesion receptors, Curr. Opin. Cell Biol. 7:650-657	
	CJ	BRÜGGEMANN et al., 1992, Human antibody production in transgenic mice: expression from 100 kb of the human IgH locus, Eur. J. Immunol. 21:1323-1326	
	CK	CAHIR McFARLAND et al., 1993, Correlation between Src family member regulation by the protein-tyrosine-phosphatase CD45 and transmembrane signaling through the T-cell receptor, Proc. Natl. Acad. Sci. USA 90:1402-1406	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/530,106
				Filing Date	April 1, 2005
				First Named Inventor	Rob Hooft Van Huijsduijnen
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	2	of	3	Attorney Docket Number	SLII-P01-003

CL	CHENG et al., 2001, Attenuation of adhesion-dependent signaling and cell spreading in transformed fibroblasts lacking protein tyrosine phosphatase-1B, J. Biol. Chem. 276:25848-25855
CM	COOK and UNGER, 2002, Protein tyrosine phosphatase 1B: a potential leptin resistance factor of obesity Dev. Cell 2:385-387
CN	den HERTOG et al., 1993, Receptor protein tyrosine phosphatase α activates pp60 ^{c-src} and is involved in neuronal differentiation, Embo J 12:3789-3798
CO	den HERTOG et al., 1999, Receptor protein-tyrosine phosphatase signalling in development, Int. J. Dev. Biol. 43:723-733
CP	D'ORO and ASHWELL, 1999, Cutting edge: The CD45 tyrosine phosphatase is an inhibitor of Lck activity in thymocytes, J. Immunol. 162:1879-1883
CQ	ESPANEL et al., 2001, Pulling strings below the surface: hormone receptor signaling through inhibition of protein tyrosine phosphatases, Endocrine 15:19-28
CR	FLINT et al., 1997, Development of "substrate-trapping" mutants to identify physiological substrates of protein tyrosine phosphatases, Proc. Natl. Acad. Sci. USA 94:1680-1685
CS	GALAKTIONOV et al., 1995, CDC25 phosphatases as potential human oncogenes, Science 269:1575-1577
CT	GRANTHAM, 1974, Amino acid difference formula to help explain protein evolution, Science, 185:862-864
CU	HOOFT van HUIJSDUIJNEN, 1998, Protein tyrosine phosphatases: counting the trees in the forest, Gene 225:1-8
CV	HUANG et al., 2001, Interference of tenascin-C with syndecan-4 binding to fibronectin blocks cell adhesion and stimulates tumor cell proliferation, Cancer Res. 61:8586-8594
CW	HURLEY et al., 1993, Differential effects of expression of the CD45 tyrosine protein phosphatase on the tyrosine phosphorylation of the <i>lck</i> , <i>fyn</i> , and <i>c-src</i> tyrosine protein kinases, Mol. Cell. Biol. 13:1651-1656
CX	KAPILA et al., 2001, Three-dimensional structural analysis of fibronectin heparin-binding domain mutations, J. Cell. Biochem. 36:156-161
CY	KIENER and MITTLER, 1989, CD45-protein tyrosine phosphatase cross-linking inhibits T cell receptor CD3-mediated activation in human T cells, J. Immunol. 143:23-28
CZ	LEDBETTER et al., 1991, CD45 cross-linking regulates phospholipase C activation and tyrosine phosphorylation of specific substrates in CD3/Ti-stimulated T cells, J. Immunol. 146:1577-1583
CA1	LIU et al., 1993, Regulation of c-Src tyrosine kinase activity by the Src SH2 domain, Oncogene 8:1119-1126
CB1	MAJETI and WEISS, 2001, Regulatory mechanisms for receptor protein tyrosine phosphatases, Chem. Rev. 101, 2441-2448
CC1	MATOZAKI and KASUGA, 1996, Roles of Protein-Tyrosine Phosphatases in Growth Factor Signalling, Cell. Signal. 8(1):13-19
CD1	MATOZAKI et al., 1994, Molecular cloning of a human transmembrane-type protein tyrosine phosphatase and its expression in gastrointestinal cancers, J. Biol. Chem. 269:2075-2081
CE1	MENDEZ et al., 1997, Functional transplant of megabase human immunoglobulin loci recapitulates human antibody response in mice, Nature Genetics 15:146-56
CF1	MENG et al., 2000, Pleiotrophin signals increased tyrosine phosphorylation of β -catenin through inactivation of the intrinsic catalytic activity of the receptor-type protein tyrosine phosphatase β/ζ , Proc. Natl. Acad. Sci. USA 97:2603-2608
CG1	MØLLER et al., 1994, Src kinase associates with a member of a distinct subfamily of protein-tyrosine phosphatases containing an ezrin-like domain, Proc. Natl. Acad. Sci. USA 91:7477-7481

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/530,106
				Filing Date	April 1, 2005
				First Named Inventor	Rob Hooft Van Huijsduijnen
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	3	of	3	Attorney Docket Number	SLII-P01-003

	CH1	NOGUCHI et al., 2001, Inhibition of Cell Growth and Spreading by Stomach Cancer-associated Protein-tyrosine Phosphatase-1 (SAP-1) through Dephosphorylation of p130 ^{cas} . J. Biol. Chem. 276(18):15216-15224	
	CI1	PATHAK and YI, 2001, Sodium Stibogluconate Is a Potent Inhibitor of Protein Tyrosine Phosphatases and Augments Cytokine Response in Hemopoietic Cell Lines, J. Immunol. 167:3391-3397	
	CJ1	PENG and CARTWRIGHT, 1995, Regulation of the Src tyrosine kinase and Syp tyrosine phosphatase by their cellular association, Oncogene 11:1955-1962	
	CK1	RUIVENKAMP et al., 2002, <i>Ptpn</i> is a candidate for the mouse colon-cancer susceptibility locus <i>Scc1</i> and is frequently deleted in human cancers, Nat. Genet. 31:295-300	
	CL1	SAHA et al., 2001, A phosphatase associated with metastasis of colorectal cancer, Science 294:1343-1346	
	CM1	SCHMIDT et al., 1996, Protein-tyrosine phosphatase activity regulates osteoclast formation and function: inhibition by alendronate, Proc. Natl. Acad. Sci. USA 93:3068-3073	
	CN1	SEO et al., 1997, Overexpression of SAP-1, a Transmembrane-Type Protein Tyrosine Phosphatase, in Human Colorectal Cancers, Biochem. Biophys. Res. Comm. 231:705-711	
	CO1	STANTON et al., 2002, The 45 kDa collagen-binding fragment of fibronectin induces matrix metalloproteinase-13 synthesis by chondrocytes and aggrecan degradation by aggrecanases. BioChem. J. 364:181-190	
	CP1	SUHR et al. 2001, Antisense oligodeoxynucleotide evidence that a unique osteoclastic protein-tyrosine phosphatase is essential for osteoclastic resorption, J. Bone Miner. Res. 16:1795-1803	
	CQ1	TAKADA et al., 2002, Induction of Apoptosis by Stomach Cancer-associated Protein-tyrosine Phosphatase-1, J. Biol. Chem. 277(37):34359-34366	
	CR1	THOMAS and BRUGGE, 1997, Cellular functions regulated by Src family kinases. Annu. Rev. Cell Dev. Biol. 13:513-609	
	CS1	TOMIZUKA et al., 2000, Double trans-chromosomal mice : maintenance of two individual human chromosome fragments containing Ig heavy and κ loci and expression of fully human antibodies, Proc. Natl. Acad. Sci. USA 97:722-727	
	CT1	TUSCHL et al., 1999, Targeted mRNA degradation by double-stranded RNA in vitro, Genes Dev 13:3191-3197	
	CU1	UDAYKUMAR and HEWLETT, 1993, A novel method employing UNG to avoid carry-over contamination in RNA-PCR, Nucleic Acids Res. 21:3917-3918	
	CV1	WAHL et al., 1983, Improved radioimaging and tumor localization with monoclonal F(ab') ₂ . J. Nucl. Med. 24:316-325	
	CW1	WÄLCHLI et al., 2000, Identification of tyrosine phosphatases that dephosphorylate the insulin receptor. A brute force approach based on "substrate-trapping" mutants, J. Biol. Chem. 275:9792-9796	
	CX1	WIENER et al., 1994, Overexpression of the tyrosine phosphatase PTP1B is associated with human ovarian carcinomas, Am. J. Obstet. Gynecol. 170:1177-1183	
	CY1	ZHENG et al., 1992, Cell transformation and activation of pp60 ^{c-src} by overexpression of a protein tyrosine phosphatase, Nature 359:336-339	
	CZ1	ZONDAG et al., 1995, Homophilic interactions mediated by receptor tyrosine phosphatases μ and κ. A critical role for the novel extracellular MAM domain, J. Biol. Chem. 270:14247-14250	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
--------------------	--	-----------------	--